BEFORE THE BOARD OF OIL, GAS AND MINING

DEPARTMENT OF NATURAL RESOURCES

IN AND FOR THE STATE OF UTAH

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF XTO ENERGY, INC., FOR AN ORDER MODIFYING THE BOARD'S ORDERS ENTERED IN CAUSE NOS. 245-1 AND 245-04 TO ALLOW THE DRILLING OF AN ADDITIONAL WELL FOR THE PRODUCTION OF GAS (INCLUDING BUT NOT LIMITED TO COALBED METHANE) FROM THE FERRON FORMATION IN EACH OF THE DRILLING UNITS ESTABLISHED THEREUNDER LOCATED IN ALL OF SECTION 35, TOWNSHIP 16 SOUTH, RANGE 7 EAST, SLM, ALL OF SECTIONS 2 AND 35, TOWNSHIP 17 SOUTH, RANGE 7 EAST, SLM, AND ALL OF SECTIONS 2, 11, 14, 23, 26, AND 35, TOWNSHIP 18 SOUTH, RANGE 7 EAST, SLM, EMERY COUNTY, UTAH.

DOCKET NO. 2009-018 CAUSE NO. 245-06

TAKEN AT: Department of Natural Resources
1594 West North Temple, Room 1040
Salt Lake City, Utah

DATE: Wednesday, December 9, 2009

TIME: 11:21 a.m. TO 2:21 p.m.

REPORTED BY: Michelle Mallonee, RPR

APPEARANCES

BOARD OF OIL, GAS AND MINING:

Douglas E. Johnson, Chairman
James T. Jensen
Ruland J. Gill, Jr.
Jake Y. Harouny
Kelly Payne
Samuel C. Quigley (Excused)
Jean Semborski

DIVISION OF OIL, GAS AND MINING:

John R. Baza, Director
Dana Dean, Associate Director, Mining
Gil Hunt, Associate Director, Oil and Gas
Steve Schneider, Administrative Policy Coordinator
Julie Ann Carter, Secretary to the Board
Marianne Burbidge, Legal Secretary

ASSISTANT ATTORNEYS GENERAL:

Steven F. Alder - Division Attorney
Fred Donaldson - Division Attorney
Michael S. Johnson - Board Attorney
Stephen Schwendiman - Board Attorney
Megan Depaulis - Board Attorney

FOR XTO ENERGY, INC.:

ANTHONY T. HUNTER, ESQ.
BEATTY & WOZNIAK, P.C.
6925 Union Park Center
Suite 525
Cottonwood Heights, Utah 84047
Telephone: (801) 676-2305

FOR THE DIVISION OF OIL, GAS, AND MINING:

STEVEN F. ALDER, ESQ.
UTAH ATTORNEY GENERAL'S OFFICE
Natural Resources Division
1594 West North Temple
Suite 300
Salt Lake City, Utah 84116
(801) 538-7200

I N D E X

Docket No. 2009-018 Cause No. 245-06

Wednesday, December 9, 2009

(The proceedings began at 11:21 a.m.)

CHAIRMAN JOHNSON: We'll ask the XTO representatives to please come forward.

This is In the Matter of the Request for Agency Action of XTO Energy, Inc., for an Order Modifying the Board's Orders Entered in Cause Nos. 245-1 and 245-04 to Allow the Drilling of an additional Well for the production of Gas (including but not limited to Coalbed Methane) from the Ferron Formation in each of the Drilling Units established thereunder Located in all of Section 35, Township 16 South, Range 7 East, SLM, all of Sections 2 and 35, Township 17 South, Range 7 East, SLM, and all of Sections 2, 11, 14, 23, 26, and 35, Township 18 South, Range 7 East, SLM, Emery County, Utah.

Mr. Hunter, you are representing the petitioner?

MR. HUNTER: I am. Anthony Hunter for XTO.

CHAIRMAN JOHNSON: And Mr. Alder, you are representing the state?

MR. ALDER: Yes, Mr. Chairman.

CHAIRMAN JOHNSON: Go ahead, Mr. Hunter.

MR. HUNTER: All right.

Ladies and gentlemen of the Board, my name is Anthony Hunter. I am representing XTO Energy, Inc., in

today's cause. I have three witnesses with me today. Mr. Ryan O'Kelley is a landman; Mr. T.H. Joshua Stark is XTO's geologist; and Mr. Leonard West is XTO's reservoir engineer. And in conformance with previous practices of the Board and for economy's sake, I ask they be sworn in at this time.

CHAIRMAN JOHNSON: Let's do that.

THE REPORTER: Will you raise your right hands, please.

You do solemnly swear the testimony you are about to give will be the truth, the whole truth, and nothing but the truth so help you God?

(The witnesses answered in the affirmative.)

CHAIRMAN JOHNSON: Excuse me, Mr. Hunter. Before you go on, Ms. Semborski?

BOARD MEMBER SEMBORSKI: Mr. Chairman, if I could, I might just acknowledge that XTO is a partner of Conoco Phillips in Carbon and Emery County. It doesn't pertain to the issue on the docket today, but there is a working relationship.

CHAIRMAN JOHNSON: Okay. You don't feel that that would require you to recuse yourself in this matter?

BOARD MEMBER SEMBORSKI: I don't feel I have a conflict of interest, but I would leave it up to the parties.

CHAIRMAN JOHNSON: Do any of the parties have any concerns?

MR. HUNTER: XTO does not think there is a conflict of interest in this situation.

MR. ALDER: The Division has no problem with Ms. Semborski being on.

CHAIRMAN JOHNSON: Thank you.

Let's proceed.

MR. HUNTER: Thank you. Resumes of all three witnesses were collectively submitted as Exhibit A in this matter. I'd like the Board to note that Messrs. West and O'Kelley were both previously recognized as exhibits -- or, sorry, as experts before the Board. Mr. O'Kelley in Cause Nos. 245-04A and -05, Mr. West was recognized as an expert in Cause Nos. 245-04-04A and -05. Based on Exhibit A, with the stipulation of the Division and with prior practice of the Board, I'd ask that they all be recognized as experts in the areas of petroleum land management, geology and reservoir engineering, prospectively.

CHAIRMAN JOHNSON: Mr. Alder?

MR. ALDER: Mr. Chairman, given that these witnesses have very recently appeared before the Board and that we're familiar with their credentials, unless the Board itself has questions, the Division has no

objection to that stipulation.

CHAIRMAN JOHNSON: Does the Board have any questions or objections? Seeing none, then, Mr. Hunter we'll recognize all three of your witnesses as experts as you requested.

MR. HUNTER: Thank you, Mr. Chairman. Also, I'd just like to confirm that it's okay to move for admission of all exhibits collectively at the end of our presentation in chief, rather than individually?

CHAIRMAN JOHNSON: That would be fine.

MR. HUNTER: Mr. Chairman, I'd like to briefly summarize the case first and then begin examining the witnesses.

CHAIRMAN JOHNSON: Thank you.

MR. HUNTER: Members of the Board, XTO owns virtually all of the coalbed methane wells in the Buzzard Bench field, comprised of portions of Township 16, 17, and 18 South, and Range 7 and 8 East. This field stretches generally to the east and south of the Huntington coalbed methane unit in Emery county.

In 1999 the Board entered an order in Cause No. 245-1 establishing 160-acre equivalent drilling units for the southern portion of the Buzzard Bench field near the town of Orangeville. We'll be referring to that portion of the lands included in today's request, presently

covered by that order as the "Orangeville area."

Then in 2006, the Board entered an order in Cause No. 245-04, establishing 160-acre equivalent drilling units for a smaller parcel in the northern portion of the Buzzard Bench field adjacent to the Huntington Shallow coalbed methane unit. We'll be referring to that portion of the lands included in today's request, presently covered by the -04 order, as the "Huntington area."

True and correct copies of the 245-1 and -04 orders were collectively submitted as Exhibit B and will be proffered into evidence at the end of XTO's presentation in chief.

XTO began an infill drilling pilot program in this area to determine if an 80-acre equivalent well density would more efficiently drain coalbed methane from the Ferron Formation in the Buzzard Bench field. Most of this program was conducted within the boundaries of the unit where drainage, spacing, and correlative rights issues are controlled by the unit agreement as recognized by the Board, when it issued Order 245-02. A few of these wells were outside the unit in lands that were covered only by the default statewide well siting rule. However, some of these lands included in the pilot program were within areas covered by prior Board orders.

By orders entered in Cause Nos. 245-04A and -05, the Board approved 80 acre equivalent well density for two quarter sections covered by prior Board orders in Cause Nos. 245-02 and -03.

XTO will request that the Board take official notice of the 245-02, -03, -04A, and -05 orders which will not be affected by, but will be relevant to, today's proceedings at the end of its presentation in chief.

The results of XTO's 11-well pilot program are encouraging and warrant a wider scale expansion. XTO believes this expansion will allow it to confirm suspected geological trends common to both the Huntington and Orangeville areas, which will enable XTO to maximize efficient recovery of gas reserves.

To maintain existing rights and expectations of adjacent owners, XTO is requesting that the 460-foot setoff limitation to any drilling unit boundary be maintained.

Finally, XTO seeks a declaration that all existing wells are deemed to be at lawful locations, notwithstanding the consequences of the relief requested if, in fact, granted.

The Board has jurisdiction over this matter pursuant to Utah Code Annotated 40-6-5(3)(b) and 40-6-6(6), as well as Utah Administrative Code Rule

R649-2-1.

XTO is the sole working interest owner in the lands covered by the request. Notice of the request was mailed via certified mail to the governmental agencies having jurisdiction over the lands. As a courtesy to the Board and to parties whose legally protected interests may -- and I'd like stress "may" -- be affected by the proceedings, pursuant to Utah Code -- excuse me, Utah Administrative Code Rule R641-106-210, notice was also mailed to all working interest owners and operators in the lands immediately adjacent to the area covered by today's request. The mailings were sent to the last addresses disclosed by the relevant federal, state, and county records.

Notice was also published in the Salt Lake Tribune and Deseret Morning News on November 22, 2009, as well as the Emery County Progress on November 24, 2009.

On November 17, 2009, the Division submitted its staff memorandum supporting the request, provided that XTO augment its exhibits with additional geological and economic testimony in evidence today.

A letter from the Utah Department of Transportation, who is a communitized working interest owner in the subject lands and the working interest owner in adjacent lands, was filed with the Board on

November 25, 2009. UDOT expressed no objection to the request. No other objections or responses were received.

And that concludes my opening remarks. And I'd like to begin examining my first witness.

CHAIRMAN JOHNSON: Go ahead.

BOARD MEMBER JENSEN: Mr. Chairman, may I make a comment?

Mr. Hunter, I was just looking at your exhibits here, and I'm looking at Exhibit D.

MR. HUNTER: Yes.

BOARD MEMBER JENSEN: And I just I wanted to make a disclosure. I don't think it's a problem. But you are showing the courtesy notice area, and it shows Western National Trust Company as being one of the owners. I am on the board of directors of Zions Bank. And Zions Bank, the wholly owned subsidiary is Western National Trust, of which I am also a director. I wanted to make that disclosure. I don't see that there's any issue, but I'd like the record to reflect my disclosure.

MR. HUNTER: One minute. I want to confer with my landman just for a moment. Mr. Jensen, are we looking at Exhibit D, or is it E?

BOARD MEMBER JENSEN: I'm looking under Exhibit D.

MR. HUNTER: Just for the record, Mr. Jensen --

BOARD MEMBER JENSEN: The northwest quarter of Section 11.

MR. HUNTER: -- XTO does have that area leased. And so XTO would be the operator and the sole working interest owner at this point. You are the lessor, but XTO does have the rights to drill and produce from that area.

BOARD MEMBER JENSEN: Well, I don't perceive that I have a conflict, but wanted to make the disclosure if someone has an issue.

MR. HUNTER: We appreciate that, but we see no conflict, either.

BOARD MEMBER JENSEN: Thank you.

MR. ALDER: Nor does the Division.

CHAIRMAN JOHNSON: Thank you.

MR. HUNTER: My first witness is Mr. O'Kelley.

DIRECT EXAMINATION

BY MR. HUNTER:

MR. HUNTER: Would you please state your name, address, and current position with XTO.

A. Ryan O'Kelley. 810 Houston Street, Fort Worth, Texas, 76102(d)76012. Landman. I basically supervise the land records for the Buzzard Bench field, which includes the subject lands.

MR. HUNTER: All right. And would you please

advise the Board of XTO's corporate status.

MR. O'KELLEY: XTO is a Delaware Corporation in good standing, with its headquarters in Fort Worth, Texas. It's duly qualified to conduct business in the state of Utah and is fully bonded with the appropriate state of Utah and federal agencies.

MR. HUNTER: Mr. O'Kelley, I'd like to turn your attention first to Exhibits C through E and ask you if you recognize them.

MR. O'KELLEY: I do.

MR. HUNTER: And were they prepared by you or by an XTO personnel with your input and review?

MR. O'KELLEY: Yes.

MR. HUNTER: Looking first to Exhibit C. Would you please tell the Board what we see here.

MR. O'KELLEY: This is a regional plat of the request area. The Huntington unit is indicated with the blue outline. The Huntington area of the Request is shown in the green outline, and the Orangeville area of the Request is shown in the red outline.

MR. HUNTER: Turning your attention to Exhibit D, Mr. O'Kelley, can you please tell us what the Board sees here?

MR. O'KELLEY: Exhibit D is a lease ownership map of the Huntington area of the Request. The Request

area is outlined in red and is covered by Board Order 245-04. And this is being all of Section 35, Township 16 South, 7 East, and all of Section 2 in Township 17 South Range 7 East.

And the yellow indicated on the plat is XTO's leasehold. XTO has 100 percent working interest within the entire Request area. And the minerals are either owned by the state or the BLM. There are two communitization agreements that are present within the Request area, indicated by the dashed green line. This is in the northeast quarter of Section 35, as well as the northeast quarter of Section 2.

The dashed blue line on the plat indicates the courtesy notice area. As a courtesy, XTO notified all adjacent owners who may be affected by increased well density adjacent to their lands. This was done as an abundance of caution. XTO will still maintain the 460-foot setback from the drilling unit.

And lastly, as indicated earlier, the Huntington unit is indicated in orange on this plat.

MR. HUNTER: All right. Mr. O'Kelley, I would like to turn your attention, then, to Exhibit E. And will you please tell us what we're looking at here.

MR. O'KELLEY: This is another lease ownership map, this time of the Orangeville area of the Request.

Again, XTO's leasehold is in yellow. And again, XTO owns 100 percent of the working interest within that Request area. That area of interest is covered by Board Order 245-01. And the area of interest is specifically all of Section 35, Township 17 South, Range 7 East, and all of Sections 2, 11, 14, 23, 26, 35, in Township 18 South, Range 7 East. The area of interest is comprised mainly of federal and state lands, but there is some fee.

There are four communitization agreements, three of which are in Section 14, and the other being in the northeast quarter of Section 23. There's one declaration of pooling, and that's located in Section 14, southeast quarter. And these are all indicated with the dashed green lines.

The dashed blue line, again, is the courtesy notice area, where XTO notified all adjacent owners that may be affected, again done out of an abundance of caution.

CHAIRMAN JOHNSON: Excuse me. Mr. Gill, do you have a question?

BOARD MEMBER GILL: I have a question on this one, and then I would like to go back to Exhibit D.

On Exhibit E, you have some white boxes that have arrows that show the ownership and the fee and how that's set out and the lease number, and that.

Go back to Exhibit D. And on the right side, you have the Huntington Shallow, and after payout, and things like that. Is that just for Section 36, or does that apply -- there's no arrow with that one.

MR. O'KELLEY: That's the entire Huntington unit. The box in the orange?

BOARD MEMBER GILL: Yes.

MR. O'KELLEY: Yes.

CHAIRMAN JOHNSON: That applies to the area?

MR. O'KELLEY: To the entire Huntington unit, yes, the entire orange.

BOARD MEMBER GILL: If that's the case, I need to do the same sort of disclosure. I have a contingent interest in a trust that may be involved with Zions stock and wit h Questar. And I don't have any relationship, I think, that causes them any concern. I'm not in control of those trusts. But I just want to make it, for the record.

MR. HUNTER: XTO sees no conflict, either. Again, this is just -- the blue outline is merely courtesy notice. We don't believe those interests would be affected at all.

CHAIRMAN JOHNSON: Mr. Alder, any concerns?

MR. ALDER: No concerns on behalf of the Division. Thank you, Mr. Gill.

CHAIRMAN JOHNSON: Thank you, Mr. Gill.

MR. HUNTER: Mr. O'Kelley, I would like to turn your attention to the certificate of mailing, as well as it's two supplements that were submitted as a pleading in this cause. I'd like you to take a look, especially at the names and addresses on those three filings. Do you recognize those?

MR. O'KELLEY: Yes, I do.

MR. HUNTER: And what are they?

MR. O'KELLEY: The names of the governmental agencies with jurisdictions over the lands.

MR. HUNTER: And who else is on these certificates?

MR. O'KELLEY: Working interest owners and operators within the courtesy area.

MR. HUNTER: And how are they compiled?

MR. O'KELLEY: From XTO's internal records, as well as from a search from a contract landman of the applicable federal, state, and county records prior to the filing.

MR. HUNTER: I'd just like the Board to take notice of Exhibit F, previously admitted in this matter, which are true and correct copies of mailing receipts received by Beatty & Wozniak of the mailing of the Request, and as well, some computer records from the

United States Postal Service for the cards that we didn't actually physically get back, but notice of delivery was granted.

I have no further questions for Mr. O'Kelley at this time, and turn it over to the Board and the Division.

CHAIRMAN JOHNSON: Mr. Alder, do you have questions for Mr. O'Kelley.

MR. ALDER: No, the Division has no questions for Mr. O'Kelley.

CHAIRMAN JOHNSON: Does the Board have any other questions for Mr. O'Kelley?

BOARD MEMBER HAROUNY: I have a question.

Back to Exhibit E. Is there a unit established at this point in time for all those sections? Is there a unit agreement?

MR. O'KELLEY: No.

BOARD MEMBER HAROUNY: Are all leases, BLM leases, within the established area?

MR. O'KELLEY: In this particular area, there's federal, state, as well as some fee.

BOARD MEMBER HAROUNY: But they're individual leases in that whole area?

MR. O'KELLEY: Correct.

BOARD MEMBER HAROUNY: No other questions.

CHAIRMAN JOHNSON: Any other questions for Mr. O'Kelley? Okay.

Thank you, go ahead.

MR. HUNTER: All right. My next witness, then, will be Mr. Stark.

Just a minute. We'll change chairs.

CHAIRMAN JOHNSON: You are up to bat, Mr. Stark.

MR. STARK: I'm excited, sir.

DIRECT EXAMINATION

BY MR. HUNTER:

MR. HUNTER: All right. Would you please state your name, address and current position with XTO?

MR. STARK: T. Joshua Stark. I'm a Division geologist in charge of Central Utah CBM. And my job does include the Buzzard Bench field.

MR. HUNTER: Mr. Stark, I'm going to show you what's been previously given to the Board as Exhibits G through I, with I being a two-page exhibit. Do you recognize these?

MR. STARK: Yes, I do.

MR. HUNTER: And were these prepared by you or XTO personnel with your supervision and review?

MR. STARK: Yes, they were.

MR. HUNTER: I'd like to turn your attention to Exhibit G. And would you please tell the Board what

we're looking at here?

MR. STARK: Exhibit G is a map showing the composite thickness of the Ferron coal in the study area. The black outline indicates the 80-acre drilling pilot area in which XTO initially looked at the 80-acre equivalent of well production. The green area immediately to the west is the Request area that is covered by Cause 245-04. And the red area to the south is the Request area that covers Cause 245-1.

The red dots that we see with the well names adjacent to them are the individual wells which will appear on the following illustration and a cross section, to demonstrate the distribution of coal in the area.

And the color code that we see here shows the net cumulative thickness of all five coal seams that comprise the upper Ferron section with the density of less than 1.75 grams per cubic centimeter. So this is a cumulative summary of thickness map of all coals in the area.

MR. HUNTER: Mr. Stark, just for clarification, the letters A and A prime, can you tell us what that is?

MR. STARK: The letters A through A prime identify the orientation of the cross section. A, I believe, will appear on the left-hand side of the cross section, and A prime will appear on the right-hand side

of the cross section.

MR. HUNTER: Thank you, Mr. Stark. I'd like to turn your attention to Exhibit H. And please tell the Board what we're looking at here.

MR. STARK: This is of the cross section that was referred to in the previous slide. And we were correct with the representative positions of A and A prime. What we see here is the distribution of the individual seams of coal in the upper Ferron sandstone section. The coals are styled from bottom to top, Alpha Bravo, Charlie, and Delta. There is a fifth packet of coal which occurs in the area but is not present in any of these particular wells. Again, the map that we saw previously would be the combined thickness of all of these individual seams.

MR. HUNTER: Mr. Stark, the Division did have a question in its memorandum about the discrepancy between the five coalbeds in our Request and the four depicted on the exhibit. You indicated that you don't expect to encounter -- I'm sorry, you don't encounter the Echo interval in the wells depicted.

Do you anticipate encountering the Echo interval in the infill wells that we are requesting today?

MR. STARK: It is possible that we may encounter the Echo coal in some of the infill wells. It is very

irregularly distributed, and we'll only know by doing, if we do or not encounter the Echo Coal seam.

MR. HUNTER: All right. And if you do encounter the Echo coal seam, is it likely to be producible?

MR. STARK: Yes, sir, it is.

MR. HUNTER: And if you did, in fact, encounter it, would you produce it?

MR. STARK: I believe so, yes.

MR. HUNTER: Mr. Stark, I'd like for you to take a look at Exhibit I now. It's a two-page exhibit, as I indicated. And we'll just orient the Board on our first slide, Exhibit I-1. Can you tell us what we see here?

MR. STARK: This is a production map that is showing the average daily production occurring during the six-month peak of an individual well. The color code starts at zero to 250 cubic feet of gas per day as yellow, light yellow, and continues all the way to red, where wells within the red field would be producing at a average maximum peak in excess of 1 million cubic feet per day.

MR. HUNTER: And Mr. Stark, you say this is the "best flow rate." Can you explain what you mean by that?

MR. STARK: An individual gas will flow at a particular rate on a daily basis. What we are looking at here is the distribution within the Huntington pool of

that area in which the gasses have the highest peak daily production rates.

MR. HUNTER: Now, Mr. Stark, I'd like to look particularly at this exhibit. Can you tell us more particularly about the area we're looking at here?

MR. STARK: This is the Huntington pool area. The area that is depicted in black is the 80-acre drilling pilot area in which we increase the density of our wells to determine the economic viability of this action.

MR. HUNTER: And what is the green.

MR. STARK: The green is the Request area, which is currently covered by Cause 245-04.

MR. HUNTER: All right. Now, Mr. Stark, I want to actually discuss what the different contours mean.

Can you let us know what trends or patterns you see emerging from these?

MR. STARK: Certainly. The red areas in the center of the illustration indicate a predominant trend, oriented northwest to southeast. This is common to the tear faults that occur in this area. Also, to the far western portion of this illustration, there is a portion of the production which is oriented in a more north to south direction. This corresponds with the Pleasant Valley fault system. This is a fault system which

appears upon the state geological maps and extends from north to south through this region.

CHAIRMAN JOHNSON: Mr. Gill.

BOARD MEMBER GILL: Would you explain what you -- your definition of a "tear fault"?

MR. STARK: A "tear fault" is a fault which moves laterally with respect to itself. In other words, if you have two volumes of rock, if one volume of rock moves downward, that would be a normal style fault. If that volume of rock moves upward, that would be a reverse fault. If the rock moves laterally with respect to itself to the other side, that would be a tear fault. Another common name for that would be a transformed or a wrench fault.

BOARD MEMBER GILL: Okay. Thank you.

MR. HUNTER: All right. And I'd like to turn your attention to Exhibit I-2. And would you please tell us what we're looking at here.

MR. STARK: This is the same style of average daily rate for peak production over a traveling six-month period with the same color code, like yellow being zero to a quarter million, and red being in excess of 1 million per day.

MR. HUNTER: And can you tell us what trends or patterns emerge here in the northern part of the red

outline?

MR. STARK: In the northern part of the Orangeville area, again we see a northwest to southeast oriented maximum production, a pattern which is correlated to these wrench or tear faults.

MR. HUNTER: All right. And can you tell us about along the eastern edge of the rest of the Request area.

MR. STARK: Along the remainder of the Orangeville area, we have a north to south oriented maximum production trend which corresponds with the extension of the Pleasant Valley fault system.

MR. HUNTER: All right. Mr. Stark, I'm going to ask you to collaborate a little bit. The Division had a question in its memo about geological controls of production. And I'd like you to take a moment to explain to the Board how and why these fault patterns that you see are correlated with these higher peak flow rates.

MR. STARK: We're very fortune in that the Board was briefed earlier in the day on some of the mechanisms of coalbed methane production. The mechanism to produce methane from coalbeds involves the decrease of reservoir pressure by the removal of formation fluids, specifically water. As the water is drawn down and the reservoir pressure is decreased, the methane spontaneously moves

away from the matrix and towards the boreholes to be produced. Obviously, areas with low permeability will have a low tendency to allow for formation fluid to move through them; and therefore, this process will be limited. Conversely, areas with a high degree of fracturing and faulting will have very high permeability, allowing for the maximum amount of water to move through this formation, greatly facilitating the removal of water, a decrease of reservoir pressure, and the production of methane from the coalbed.

MR. HUNTER: And, Mr. Stark, can you explain to the Board why the current pattern spacing well density does not adequately drain reservoir gas resources?

MR. STARK: Well, we have found that these faults are a very high inclination; in other words, they are -- you can hit them with a well, but the well bed might be 200, 300 feet near the fracture. 200, 300 feet to the east or west will not be intercepted by the bore hole. Consequently, you can leave a lot of gas in the ground because you are not intercepting the maximum number of potential conduits to remove fluid from the formation and produce that gas.

MR. HUNTER: All right. Mr. Stark, in your expert opinion, does the north to south fault trend, found on the surface to the north of the Pleasant Valley

system you referred to of the Request area, continue underground down the west side of the Huntington area and through the west side of the Orangeville area?

MR. STARK: Yes.

MR. HUNTER: And in your expert opinion, does the northwest to southeast fault trend, found on the east side of the Huntington area and the northern edge of the Orangeville area, continue down through the rest of the Orangeville area?

MR. STARK: Yes.

MR. HUNTER: And in your expert opinion, will drilling additional wells in the areas covered by the request allow XTO to confirm the correlation between the fault structures and the higher rates of recovery of coalbed methane.

MR. STARK: Yes.

MR. HUNTER: I have no further questions of Mr. Stark right now.

CHAIRMAN JOHNSON: Mr. Alder, are there any questions of Mr. Stark?

MR. ALDER: If I could have one second.

I think we do have a question, Mr. Chairman. But I would ask the Board's indulgence if I could ask our geologist, Brad, to ask -- explain the questions. I'm not sure I understand it. Would that be all right?

CHAIRMAN JOHNSON: Brad, just introduce yourself for the record.

MR. HILL: Brad Hill. I'm the oil and gas permitting manager for the Division.

CROSS-EXAMINATION

BY MR. HILL:

MR. HILL: Could you tell us how this -- the enhancement of production by the fault system might affect the drainage patterns.

MR. STARK: That's an excellent question.

Drainage patterns has always been a significant question in the Huntington and Orangeville area. We've seen a significant variation in the drainage from individual wells. In fact, this is one of the problems that we dealt with, early on, in looking at a volumetric determination of drainage versus a non-volumetric drainage pattern.

What we have determined is that certain wells appear to produce a significantly greater amount of gas than other wells do. And this is why we are so focused upon the orientation of enhanced permeability through the fault system. We have been able to determine the position of this enhanced permeability through the utilization of propriety 2d seismic data. This is the methodology in which we have moved to selecting

additional 80-acre locations. I don't know if that answered your question.

MR. HILL: Could you expand that a little bit on the geometry of the drainage patterns?

MR. STARK: It is a variable pattern. We would anticipate that maximum drainage would be elongated along the orientation or the strike, as it were, of the fractures and the faults, which is one of the reasons why we see the elongation in the north-south direction within the Pleasant Valley fault system. The Pleasant Valley fault system is a basin and a range collapse system with a high degree of fracturing, as we have been able to determine through the drilling of a number of wells within the system.

In this case, we anticipate that the drainage pattern would be elongated in a north to south direction. Similarly, in the areas where we see the northwest to southeast oriented tear faults, we anticipate that there would be a certain elongation along a northwest to southeast access.

MR. ALDER: I think that answers the question, except if we could just clarify: Then, for record, the evidence that you have of this fault, and which has not been included in the exhibits, is proprietary 2d seismic and the other drilling experience. Is that correct?

MR. STARK: That is correct. There is a significant capital value to this proprietary information, which at this time we do not wish to provide to the general public.

MR. ALDER: Thank you. No other questions.

CHAIRMAN JOHNSON: Does the Board have any questions for Mr. Stark?

BOARD MEMBER HAROUNY: I have a couple questions.

CHAIRMAN JOHNSON: Mr. Harouny, go ahead.

BOARD MEMBER HAROUNY: The density cutoff is 175, you said?

MR. STARK: 1.75 grams per cubic centimeter.

BOARD MEMBER HAROUNY: Do you have any kind of ash content in this coal?

MR. STARK: Ash content in all coal seams is variable. Generally speaking, an ash content of 15 to 20 percent still will provide a density cutoff on a 1.75 basis. Some of the operators actually operate at a 2.0 gram per cubic centimeter basis. We have found, however, that this includes a significant portion of carboniferous shale within the calculation, which does not have an equivalent permeability to a reservoir quality coal reservoir.

BOARD MEMBER HAROUNY: The two maps that I

looked at -- I recall the first one -- clearly indicate that there's a direct relationship between your isopach and high flow rates.

BOARD MEMBER GILL: Exhibit G.

BOARD MEMBER HAROUNY: I believe it was Exhibit G, correct. That the thicker the coals, the more the volume, so to speak.

MR. STARK: Are you asking me to respond on that, sir?

BOARD MEMBER HAROUNY: Yes. Is there such a relationship? Is that an accurate statement?

MR. STARK: There is not, as we can see, a relationship between the volumetrics and absolute flow rates or cumulative flow rates. We have found, through the course of six years of research, that ultimate production appears to be independent of actual coal thickness. Being said that you can have an equivalent coal thickness in two wells which are adjacent to each other, one well will be highly economic, the other well will be noneconomic. And it is not consequent to the thickness of the coal, itself, but rather to the mechanisms, specifically the fractures and the faults and the fluid moving through the faults, which ultimately determine production.

BOARD MEMBER HAROUNY: Then would you explain to

me why Exhibit I pretty much fits on top of your Exhibit H, if you look at the thickness of coal and the rate of Exhibit I.

MR. STARK: In fact, were we to be looking at an exhibit that showed the fault orientations, we would find a very high correlation coefficient between the positions, in this case of the northwest to southeast oriented tear faults and the area of maximum production.

We can look further to the east in the low volume area and see that we have overall conditions of very poor gas production, although we do have significant variation in the thickness of the coals. Therefore, I would have to respond in the negative to you, sir; the coal thickness does not have bearing on ultimate gas production.

BOARD MEMBER HAROUNY: Now, Exhibit H is the cross section. It shows the Ferron coals are within the Ferron sandstone bodies. Are there sandstones there and adjacent to these coals?

MR. STARK: Yes. In this case, we have divided the overall Ferron section into what we refer to as the upper Ferron sandstone and the lower Ferron sandstone. The lower Ferron sandstone is entirely devoid of coals and consists of that portion of the Delta which would run all the way up through the beach, or what is referred to

as the shore face.

Above that would be the swamp of the Ferron and the upper Ferron sandstone. This particular portion of the Ferron consists of coals, sandstone channels, silt stones and clay stones.

BOARD MEMBER HAROUNY: So would it be fair to ask that the Ferron sandstones are predominantly wet sand stones?

MR. STARK: This is an area of significant structural development. Consequently, there have been developed in this area certain areas of four-way closure which have been filled with gas. Therefore, there is some areas in this region which are gas productive from the Ferron. Generally speaking, these areas, small areas of gas production, are not highly economic. However, there are a few areas to the west where the Ferron sandstone has been an excellent producer.

BOARD MEMBER HAROUNY: Specifically speaking about the areas that you've looked at, areas that are part of the petition, are the Ferron sandstones wet or dry in these areas? Are they producing gas or are they producing water?

MR. STARK: I would say that in the main, this is an area without significant structural closure. And the great balance of production is derived from the coals

and not from the sandstones.

BOARD MEMBER HAROUNY: So the sandstone is -- the answer is yes or no: Are the sandstones wet, or are they not wet?

MR. STARK: I would say the balance of the sandstones here are wet and non gas saturated.

BOARD MEMBER HAROUNY: So wouldn't that be an issue with production, if you have a wrench flow going through the same thing and therefore creating an avenue for water to travel as well as gas. I mean, the water production will be higher on that lower density.

MR. STARK: The average porosity for the lower Ferron sandstones in this area ranges from about 7 to 10 percent. Most of the primary porosity that is associated with these sandstones has been destroyed. The only sandstone porosity which is existent here is a secondary sandstone porosity, which is not very effective. Consequently, these sandstones do not move a substantial amount of water within them, within the main body of the matrix of those sand reservoirs.

BOARD MEMBER HAROUNY: Understood. But the faults do.

MR. STARK: The faults do, that's right. And the faults are very, very important with respect to the removal of water, not only from the sandstones, but from

the coals. Fortunately, there is not a lot of mobile water within the sandstones to move. And so evacuating the water from the faults thereby decreases the pressure in the coals, which allows the methane to flow from the coals into the bore hole.

BOARD MEMBER HAROUNY: Do you have an estimate of -- what kind of averages are you looking per day for water production per well?

MR. STARK: The water production in the field varies. There is a significantly larger amount of water that is produced from the Orangeville area than there is from the Huntington area. Predominantly, that is because the dominant style of fault in the Huntington area is these tear faults. And they seem to have a transmissivity of water, which is substantially less than the faults that are oriented in a north to south orientation.

BOARD MEMBER HAROUNY: Does the fracture pattern help the water production, as well? And what type of fractures do you think you have with the wrench faults?

MR. STARK: The type of fractures that I would anticipate from the wrench faults would be developed in a pattern which would be at an acute angle to the direction of the movement of the fault. In other words, the fractures would be oriented approximately 15 degrees to

the main principal direction of offset of the fault.

Within the north to south oriented fault patterns, which is, in fact, a collapse, I would anticipate that the fractures would be oriented parallel to the margins of the collapse, that is to say, north to south.

BOARD MEMBER HAROUNY: So predominantly tension induced it.

MR. STARK: Tension would be responsible for the north to south oriented faults. However, compression or shortening would be responsible for the northwest to southeast style faults associated with the Utah Overthrust.

BOARD MEMBER HAROUNY: I don't have any others --

CHAIRMAN JOHNSON: Mr. Gill.

BOARD MEMBER HAROUNY: -- thank you.

BOARD MEMBER GILL: Tell me again where this field is located in reference to, say, Price.

MR. STARK: Price would be located approximately 20 miles to the north, northeast. It would be -- yeah, right about where he's indicating, right up there.

BOARD MEMBER GILL: And you used the term "basin and range collapse."

MR. STARK: Yes, sir.

BOARD MEMBER GILL: I didn't realize you had that in this area. Can you explain a little more about that? Because I thought that was sort of more to the west of I-15.

MR. STARK: Absolutely. The Pleasant Valley fault system and the big brother, the Joe's Valley fault system are the eastern-most examples of basin and range collapse. Basin and range collapse occurred approximately 15 million years ago as a response to the overall uplifting of the Colorado plateau, which has been underway for the last 25 million years and continues today.

BOARD MEMBER GILL: And then just for my own clarification, if what I'm hearing you is coming through, how would this particular field and what you are telling us differ from, say, fractured volcanics? It sounds like you've got some sort of a coal system where fractures are your main play. And then the fault system plays into the fractures.

MR. STARK: The fractures are the vehicle by which the water is removed from the system. In the large collapses, the entire section is brecciated. And so the permeability is extraordinarily high. We have to take specific safeguards when we drill through this area with respect to drilling mud and completion techniques.

However, it allows for the very rapid and large volume evacuation of fluid from the overall system because the system, from top to bottom, is entirely fractured. Thereby, this is an area of initial large volume water production and ultimately large volume gas production.

BOARD MEMBER GILL: So in terms of -- is it -- does it have any comparison to fractured volcanics, in your mind?

MR. STARK: I am not an expert on fractured volcanics, sir, so I don't think that I can give you an appropriate answer to that question.

BOARD MEMBER GILL: Thank you.

CHAIRMAN JOHNSON: Any other questions? Mr. Harouny.

BOARD MEMBER HAROUNY: Are these wells fracked or gone through water enhancement or some kind of enhancement at the completion level?

MR. STARK: Which wells, specifically, are you referring to?

BOARD MEMBER HAROUNY: The wells that have been there already, the wells that are part of the rates that you've come up with, the high rate wells -- or all wells on the average, the completion.

MR. STARK: Although this is a question that is probably more appropriate for an engineer, I will say

that these wells have been completed with frac technology.

BOARD MEMBER HAROUNY: Okay.

CHAIRMAN JOHNSON: Any other questions?

Thank you, Mr. Stark.

MR. STARK: Thank you.

CHAIRMAN JOHNSON: Go ahead, Mr. Hunter.

MR. HUNTER: I'll call my next witness, Mr. West -- do our chair switching routine, here.

DIRECT EXAMINATION

BY MR. HUNTER:

MR. HUNTER: Mr. West, can you please state your name, address, and current position with XTO?

MR. WEST: Yes. My name is Leonard West. My address is 810 Houston Street, Fort Worth, Texas, 76102. I'm the reservoir engineer for Utah, particularly for the Buzzard Bench and Drunkard Wash area, our coalbed methane areas. And I'm also the special projects manager for XTO Energy.

MR. HUNTER: Mr. West, I'd like to show you Exhibits J through P and ask you if you recognize these exhibits.

MR. WEST: Yes, I do.

MR. HUNTER: And were they prepared by you or XTO's personnel under your supervision?

MR. WEST: Yes, they were.

MR. HUNTER: I'd like to turn your attention to Exhibit J. And would you let us know what we're looking at here?

MR. WEST: Exhibit J is showing our infill drilling pilot area. The green dashed lines outline our infill drilling pilot area where we have drilled a total of 11 infill wells in this area. Those 11 infill wells, that basically get us to 80-acre spacing within the 160-acre spacing units that they are all in, are shown in red.

MR. HUNTER: And Mr. West, just to clarify, the large majority of this area outlined in green, is that actually spaced by a spacing order at this time?

MR. WEST: A large portion of this is actually in the Huntington unit, which is exempt from spacing rules. There are a few areas that we have had to go in and get some more relief from the Board in order to drill our infill wells. But most of it is within the Huntington unit.

MR. HUNTER: And specifically, Mr. West, do you recall testifying in Cause No. 245-04A regarding the northwest quarter of Section 1?

MR. WEST: Yes.

MR. HUNTER: And do you recall testifying in

245-05 regarding the northeast quarter of Section 6 depicted here?

MR. WEST: Yes.

MR. HUNTER: And Mr. West, to your knowledge is any of the other area spaced or currently covered by a Board order, not including the Huntington unit or the two matters I just referred to?

MR. WEST: No.

MR. HUNTER: All right. Thank you.

Mr. West, I'd like to turn your attention to Exhibit K. And can you please tell us what we're looking at here?

MR. WEST: Yes. This is a production plot for the pilot area. We have shown the base production trend. The lower production trend is based on the summation of all the production from the 18 base wells in our pilot area. And that trend shows that, with the infill drilling program, we really have not significantly changed the production decline of the base wells. And the base wells will recover 31,551 million cubic feet, just over 31 bcf of gas, from those 18 wells.

In addition, we have shown the uplift generated by our 11 infill wells. The upper curve is the summation of all wells within the pilot. And we have projected our reserves for those wells, along with the base wells. And

this shows that we are getting significant infill uplift from our infill program.

The total of our base plus infill wells have a total estimated ultimate recovery of just over 51 bcf of gas.

MR. HUNTER: Mr. West, I'd like you to look at Exhibit L for me. And can you tell us what this shows?

MR. WEST: This is a table showing the calculation of our average recovery for our infill wells. We start with the 51 bcf of gas from both the base and infill wells, and then subtract from that the just over 31 bcf of gas from the base wells. This demonstrates that just under 20 bcf of gas is associated with the 11 infill wells, which yields a 1.8 bcf incremental recovery per infill well.

MR. HUNTER: Mr. West, I'd like you to look at Exhibit M. And can you tell us what we see here?

MR. WEST: Yes. This is a typical production profile, an average production profile that we get from our infill wells. They typically, based on normalizing the wells' production history that we have from the program, initially come in in approximately 500 mcf a day, are flat for about two years, and then they declined at about 11 percent.

MR. HUNTER: All right. Mr. West, would you

look at Exhibit N and tell us what we see here.

MR. WEST: This is the economic analysis for a typical infill well. Our investment for our wells, at least through 2008, was about $1.2 million per well for a vertical well. As previously stated, the reserves associated with our wells is about 1.8 bcf. We are using a wellhead gas price of $4.54. Our long-term projections for gas price is -- we anticipate that the lower level of that will be approximately $6 per mcf NYMEX. And then we have taken the appropriate historical decrement off of $6 NYMEX, to get to a wellhead price of $4.54.

Using the production profile from a previous exhibit, which is typical of production we get from these wells, that yields a rate of return of just under 29 percent and a present value profit at 10 percent of right at $1 million.

MR. HUNTER: All right. Mr. West, I have few questions for you about this slide. Your $1.2 estimate was a drilling cost, you said, as of 2008?

MR. WEST: Yes. We did not drill any wells in 2009, due to the current economic conditions. Our actual drilling costs, in general, are lower because of the current economic situation. We're seeing lower well costs in those areas where we have continued to drill. So it's likely that our current well costs would be

somewhat less than that. But I've used historical, actual data to base my well costs on.

MR. HUNTER: Mr. West, the Division did have a few questions about your calculations, and I'd like you to address that by explaining how your calculations accounted for costs, revenue, and yearly production. Specifically, we can start with the costs, if you wouldn't mind.

MR. WEST: Yeah. The operating costs that I've included in my economics were based on our historical operating costs for Buzzard Bench field. And they were based, again, on historical data of actual operating costs per well that we see demonstrated in the field.

MR. HUNTER: And also, for your yearly production, you have included the Exhibit M, as you referred to, and does that comport with your experience as to the rest of the field, as well?

MR. WEST: Well, that's typical of the infill wells and the wells in the area that we are focusing on here, yes.

MR. HUNTER: And again, you expect an overall rate of return based on your historical data of just under 29 percent?

MR. WEST: Yes.

MR. HUNTER: I'd like you to look at Exhibit O

now, and tell us what you see here.

MR. WEST: This is a comparison of the base wells in the infill drilling study area, and the base wells in the areas that we are wanting to extend the opportunity to drill infill wells into.

On the left is the infill drilling study area. All the base wells are listed with their estimated recoveries. That shows that the average recovery is just about 1.8 bcf, about a 1.75. Unfortunately, someone's head is in the way. Yeah, 1.753.

Then on the right is the increased density area that we're proposing in our application. And that shows that the base wells in that area also have essentially a 1.8 bcf recovery, or 1.754 bcf recovery in that area. So these areas have very similar base production, essentially exactly the same base production. So we would anticipate that infill wells would perform similarly in both areas.

MR. HUNTER: All right. Mr. West, I'll have you look at Exhibit P. And will you please tell us what we're seeing here.

MR. WEST: This is a economic sensitivity analysis on our economics for the wells. We've shown the relationship between the reserves that individual wells produce and the rate of return then generated by that

reserve. We have also shown two curves for varying gas prices. The lower curve, in green, is based on a $6 NYMEX gas price. That's equivalent to the $4.54 wellhead price shown in my previous economics. And that's XTO's long-range projection of where we expect the lower range of gas prices to be.

The upper curve, which is in red, is representative of economics that we would see for the various reserve levels based on an $8 NYMEX gas price. It is also adjusted by the historical decrement, and you get a wellhead price for that red curve of $5.84. This shows that based on a $6 NYMEX gas, our expected reserves, as previously stated with a 1.8 bcf recovery, is just under a 28 percent rate of return. If we reduce the reserves by approximately 44 percent all the way down to 1 bcf, you still have an acceptable rate of return of 10 percent.

Another way to look at that is if you kept the recovery at 1.8 bcf and lowered gas price 44 percent below the $6 NYMEX, you would still have, essentially, a 10 percent rate of return project which, on the downside, is continuing to be profitable.

The $8 NYMEX, which perhaps many people question whether we'll ever get there again, but we are never very good at predicting that. In my 38-year history, that's

one thing I will never say I ever know what's going to happen to. But in the upside, just $8 NYMEX, the projects are very attractive, obviously.

MR. HUNTER: All right. Mr. West, the Division had some specific questions about your price estimates. And I believe that you've addressed them. But I just want to point out -- just ask you one more time: You could be wrong on the reserve calculations that you've shown the Board in previous exhibits, by a factor of 44 percent difference, and still have a profitable project. Is that correct?

MR. WEST: That's correct.

MR. HUNTER: And conversely, you could be wrong on the price by 44 percent and still have an attractive project?

MR. WEST: Yes, that's true.

MR. HUNTER: Mr. West, in your expert opinion, will drilling additional wells into these fault structures, referred to from Mr. Stark, result in greater ultimate recovery of gas in the Ferron formation?

MR. WEST: Yes.

MR. HUNTER: In your expert opinion, does the current well density of one well per 160 acres leave substantial reserves on the order of 1.8 bcf per well of gas unrecovered?

MR. WEST: Yes.

MR. HUNTER: And in your expert opinion, can these additional reserves be recovered economically?

MR. WEST: Yes.

MR. HUNTER: And in your expert opinion, can these additional reserves be recovered without wasted resource?

MR. WEST: Yes.

MR. HUNTER: I have no further questions at this time.

CHAIRMAN JOHNSON: Mr. Alder?

MR. ALDER: Mr. Chairman, yes, the Division has one question.

As was noted, we had some questions about the economics, particularly Exhibit O, if you could turn to that. And rather than have our petroleum engineer, Mr. Dustin Doucet, whisper in my ear, would it be appropriate and acceptable if he were allowed to ask the question of the witness?

CHAIRMAN JOHNSON: That would be appropriate.

MR. ALDER: Thank you.

CHAIRMAN JOHNSON: Introduce yourself for the record, please.

CROSS-EXAMINATION

BY MR. DOUCET:

MR. DOUCET: Dustin Doucet. I'm the petroleum engineer for the Division.

Like Mr. Alder had stated, on Exhibit O, you had stated that the base wells had a production with an ultimate recovery of approximately 1.8 bcf. I guess, are you stating that your infill wells will have an equivalent recovery?

MR. WEST: That is what our analysis does show, is that our infill wells are equivalent to the average original well, which I must admit was a little surprising to us. But this is a high productivity area. That's what we focused on, is our highest productivity area at this point. I guess I shouldn't have been as surprised when I saw the numbers come out, in that we had wells in the pilot area that were better than any of their offsets. We had -- I don't recall a well number, but there was a couple of -- one well, in particular, that was making over a million a day, and all the offsets peaked at 4- or 500. And so we are hitting fracture systems with these new wells that we weren't encountering with the base wells. And that's why, I think, we're seeing such similar production from both the infill wells and the original base wells.

MR. DOUCET: Are you seeing any evidence of interference or -- between wells, communication between

wells?

MR. WEST: Looking at our production plot and on the individual wells that I looked at as I did my reserve analysis, you really don't see any significant interference. If you look at the decline curve for the base wells alone, you don't see a break anywhere that suggests that we're getting interference between the base wells and the infill wells up to this point. You know, as we get more history, maybe we'll see some. But up to this point, we haven't seen interference between the base wells and the infill wells.

MR. DOUCET: I guess that's kind of my next question. It's been fairly -- most of the infill wells have been drilled fairly recently, I think since July of 2008 -- correct me if I'm wrong. Maybe you can answer that question.

When have most of these infill wells been drilled?

MR. WEST: They were drilled -- there are a couple that were drilled in 2006, but also '07 and '08. I don't think all of them were just in '08. We have a couple years of history on some of the wells. I guess it is 2008, isn't it.

I stand corrected. All of these infill wells did start about June of 2008, is when they came on

production. Some of them were drilled in 2007, but we did not complete them until 2008. That's why they are coming on at that point. Several of them were drilled late 2007. And then we got into the winter season and didn't complete them until we got back into the spring of 2008.

MR. DOUCET: You are saying on individual well declines, you are not seeing any evidence of interference or change?

MR. WEST: No, we're not. And what we are seeing is some backup in our surface facilities. But even that is not significantly impacting the base wells.

We anticipate when we do some de-bottlenecking of some of our surface facilities, the rates in both the base and the new wells will probably come up some.

MR. DOUCET: Okay. Just one more question. As far as the -- your type decline curve for your infill wells, I believe it was Exhibit M?

MR. WEST: Yes.

MR. DOUCET: Are all -- are the ones that you've reviewed on an individual well basis, did they all act like this, are they flatlining, or do you see some evidence of decline right away?

MR. WEST: Most of them are showing a flat decline for approximately two years. Now some are likely

going to go longer and some shorter.

In looking at this baseline, I looked at both the infill wells -- the 11 infill wells -- and I also looked at all of the wells that we have drilled since about 2006 forward. And they both show very similar characteristics. One thing we're not seeing, as is demonstrated here, we don't see much build. We have dewatered the system to a large extent. Even the infill wells that are showing similar reserves are coming in at peak rate within a month or two, and then they are flatlining. And the water rates that we're seeing are more consistent with our base wells.

Now initially, we'll have a higher water rate for a month or two, but that drops off relatively quickly. And we have had -- not in this specific pilot area, but we have drilled some infill wells to the south, in the Orangeville area, where we don't have spacing restrictions. One in particular that may -- it may have a day of gas and zero water. And again, we don't see any interference between it and other wells.

MR. DOUCET: This type curve, this is just for the infill wells, like the 11 infill wells?

MR. WEST: Yes. This is for the 11 infill wells. And if you did it for a broader number of new wells that we've drilled, it would be a little bit

different than the average initial rate, because some of those are outside of the high productivity area, but they show a similar production profile of getting to their peak rate within a month or two, and flatlining for about two years, and then going on decline.

MR. DOUCET: That's all the questions I had.

CHAIRMAN JOHNSON: Mr. Alder, any other questions?

MR. ALDER: No. Thank you, Mr. Chairman.

CHAIRMAN JOHNSON: Does the Board have any questions for Mr. West?

BOARD MEMBER SEMBORSKI: I've got a question.

CHAIRMAN JOHNSON: Let's start with Ms. Semborski.

BOARD MEMBER SEMBORSKI: Is there reason to believe that perhaps you've still not reached optimal spacing that -- you know, if you don't have interference between the wells and you're not seeing any impacts, is it possible that there may still be room to drill more in between?

MR. WEST: Certainly, it is possible. We have definite indication that we need to go down to 80-acre spacing. Once we fully develop on 80s, I suspect we will be trying to reduce spacing from that in some areas, also.

When you look at the field, there are areas that -- although they're not only on 160s, or some areas where we've done our pilot on 80s -- you have, in essence, 40-acre spaced wells. And they perform very similarly. It's too early to tell, because we do have -- as Josh was saying, our drainage areas are more controlled by the fracture systems than they are the volumetrics. And so you have some oddly-shaped drainage areas because of that.

It could be that wells on 80 acres will optimally develop the whole area, because you are getting into enough of the parallel fracture systems to drain everything. But we might find that we need something even more dense than 80. Only time will tell. And since volumetrics are not very helpful in analyzing it, about the only way to tell is go try some wells, as we did here.

BOARD MEMBER SEMBORSKI: Do you know your structure, your fault locations well enough to be able to determine well placement?

MR. WEST: As Josh has stated, we do have some 2d seismic lines that help with that. We also have encountered some of the faults with our drill wells over the last four or five years. But we still get surprises, you know. The answer is: We have a better picture today

than we did when we purchased the property from Chevron in 2004, but we still get surprises.

BOARD MEMBER SEMBORSKI: Thank you.

CHAIRMAN JOHNSON: Mr. Gill.

BOARD MEMBER GILL: I'd refer you to Exhibit O. And on the right-hand column, you have a UP&L 14-55. I've been trying to find that on one of the maps, like, say, I-1 or I-2. I can't seem to find it. Where is that well located, or is it in the area?

MR. WEST: It is. Just a second let me find -- it's in Section 14.

BOARD MEMBER GILL: So it would be on which exhibit, I-1 or I-2?

MR. HUNTER: Mr. Gill, I think you need to look at I-2.

BOARD MEMBER GILL: I-2.

MR. WEST: Be in Section 14 in -- that's at 18 South, 7 East, Section 14.

BOARD MEMBER GILL: So is that the one in the northwest quarter?

MR. WEST: Yes.

BOARD MEMBER GILL: That's how you are basing -- okay. That also helps me explain that. It looks like that well is well above the average.

MR. WEST: Yes. It's the best producing well in

the field. And it is quite -- I mean, it's a real anomaly, in that you've got 40-acre, in essence, wells based off of it, that are very poor. And yet we, in that area north of the 14-55, we've drilled some additional wells that have intersected fault system going northwest. And that's one of the wells that came in at over a million a day. And we don't really see any significant impact on the 14-55, either.

BOARD MEMBER GILL: So in terms of the lessons learned, we started this whole project as a pilot project, which means, Trust us, not knowing everything. What lessons have you learned so far? What are the conclusions you can reach in terms of this pilot project? I think -- am I clear in understanding that you are asking this continue to be a pilot-type project? It's certainly unique.

MR. WEST: We're not really -- I don't know that we would say that we're asking to continue the pilot project. We're asking for the opportunity to expand our infill drilling and other high productivity areas and see what kind of success we can have there. And we think it's a proven opportunity at this point, as opposed to needing to be a pilot.

We will still get surprises, as you always do in a development program. But looking at the similarity in

the base production and the new area we're going into and the fact that they are highly fractured areas, as the original pilot area was, that we should get very similar results. And so it's really not extending a pilot as much as expanding what we learned from that pilot.

And what we learned from that pilot is that we can get very similar wells to the original wells, because we're not adequately draining all the fracture systems. Although they were dewatered, we're not contacting the gas and the coals and getting it out without drilling additional wells closer to the matrix of the coal.

We also have learned that it is the fracture system that is most impacting productivity. Not that it's the only thing that's controlling, but there's a much stronger correlation between the fracture systems and the fault systems that are generating those fracture systems, and the high productivity, than we are seeing between volumetrics. And the biggest way to look at that is on the -- easiest way to see that on the big-picture basis, is over on the east side of the field where we have the collapse zones and the fracture systems that Josh described, that's where all of our high productivity wells are -- west side. Did I say "east"? Sorry. West side. I got my directions backwards.

On the east side, both in Buzzard Bench and in

Drunkard's Wash, we see some areas that have similar coal thicknesses, but very poor productivity. And that's where you've got to look at what's driving the production, at least in Buzzard's Bench. Because the east side, if you look at the isopach map, has just as many areas of 20, 30 foot coal as we see on the west side. On the west side, we've got million-a-day wells, and 14-55 peaked, I think, at about, I think, 3 1/2 million -- 4 1/2 million. And we don't see any of those. In fact all of the wells on our east side of Huntington, look like type gas wells. They come in at an initial rate, and they decline very rapidly. And then they have a very slow decline at less than 100 mcf a day.

BOARD MEMBER GILL: Are you doing anything to horizontal drill to maximize your contact with the fractures and the faults?

MR. WEST: No, we have not done any horizontal drilling, up to this point.

BOARD MEMBER GILL: Any indicated in the future? And if that's proprietary, don't answer it.

MR. WEST: We have considered it, particularly on the east side. We're doing a lot of other things -- we're doing several things that we're still trying to identify: How can we enhance the development on the east side to unlock some of the gas that is in the thicker

coals but not fractured as much as we see over on the west side.

We have considered over along one of the eastern anticlines, as we see it, doing the horizontal well. In fact, we had it in our plans for this year. But with the current economic situation, that's been delayed for a couple of years, at best. Plus, we have now seen a lot more opportunity for infill drilling in these higher productivity areas at the same time.

BOARD MEMBER GILL: The reason I asked that last question is, one of our obligations under the statute is to make sure that we don't drill unnecessary wells. So I'd just like just to press that a little bit, and give me your expert opinion.

Is your proposal, in your judgment -- will not result in the drilling of unnecessary wells?

MR. WEST: I don't think that this proposal will result in any unnecessary wells. Our evidence in drilling these faulted, highly fractured areas is that we get significant incremental recovery from every well that we have drilled in those areas.

BOARD MEMBER GILL: I had a couple questions on your economics on Exhibit N. And I'm sure Mr. Harouny and I will probably ask some more.

In terms of total -- well, on Exhibit N, that's

a million two to what depth? What's the average depth out there?

MR. WEST: Our average depth is generally about 4500 feet.

BOARD MEMBER GILL: So then you've got significant fracturing costs, and --

MR. WEST: Yes. All of our wells are hydraulically fractured. Generally, we will pump anywhere from 350,000 -- 350,000 pounds of sand to 500-, 550,000 pounds of sand in our typical frac jobs.

We've actually kind of cut back on the frac jobs. And they are more typically now 250 to 350 in a lot of the areas. When we first took over the area, we thought we saw a relationship between higher sand volumes and productivity. And our experience in trying to improve productivity in low productivity areas just by doing bigger fracs was not successful. So we've come back to more typically 350,000 pounds of sand or less.

BOARD MEMBER GILL: And then the present value just seemed low to me. But I didn't know what your total algebraic equation was.

MR. WEST: That is the present value. It's not the...

BOARD MEMBER GILL: It's not the total value, yeah.

MR. WEST: Yeah. It's discounted at 10 percent. And when you get beyond...

BOARD MEMBER GILL: Twenty years, and it's zero, so...

MR. WEST: Yeah. And if you really look at it, even at ten percent, you get past five years and you're at half or less. And you get beyond ten years, and that lasts -- anything beyond about ten years generates very little present value.

BOARD MEMBER GILL: That's all I have right now.

CHAIRMAN JOHNSON: Mr. Harouny.

BOARD MEMBER HAROUNY: I'm trying to make sense of Exhibit O, first of all. You have infill drilling study area, wells -- a number of wells that are drilled. Are those wells that were drilled after the order was issued, or --

MR. WEST: No, these are the base wells. These are the infill drilling study area base wells --

BOARD MEMBER HAROUNY: -- the original wells.

MR. WEST: -- the original wells, yes.

BOARD MEMBER HAROUNY: So, and then on the right you have the increased well density.

MR. WEST: Those are the areas that we are proposing in our action today, the areas that we are wanting to be able to do infill drilling. And these are

the base wells within that area. So I'm trying to compare the base wells and how they were -- what their recoveries were in the pilot area. And then what are the base wells in the area that we want to extend the infill drilling? And how similar are they?

And in this case, they -- both areas -- the base wells have essentially the same average recovery per well. Have you done a type curve for this, versus -- the left column versus the right column?

With the older wells, it's very difficult to get a meaningful type curve. And then you have wells like the 14-55 that built in production over seven years. You have the A3506 and the A3589, both that built over four or five years. And those three wells, alone, really dominate the type -- you pull those out, and you still have a lot of different drainage scenarios as they were developing, as our previous operators drilled all of these wells. And as they were developing the field and dewatering, you don't see nearly -- I mean, you do see that there is a dewatering time in all of them in the -- those that were drilled in the earlier life of the field.

BOARD MEMBER HAROUNY: The assumption then is, on my part, that these two areas are not -- the 1.753 bcf is not equal to 1.754, shown here, or similar, simply because if you normalize the curves and you look at all

the wells that are junk and take the star performers out of it to come up with an average, it would not even be similar. So the areas are different.

MR. WEST: Well, you have high volume wells in both areas. You do have some poor wells on the edge of the new area. But just like you have the 14-55 making 17 bcf, you have its offsets, like the Norris 14-40 making only 785, and the 14-53 making 77. So the 14-53 is a direct offset to the 14-55. And you've got a 43 mcf, or 43 million cubic foot well directly offset to a 17 bcf well, which shows the erratic distribution of the fault system.

We have a better idea of where the quarters are, but it's going to take drilling additional wells in order to hit more of those fault systems and increase the recovery.

BOARD MEMBER HAROUNY: My assumption, right now, is that the infill drilling study area reserves are not comparable to the increased well density area, simply because of the averaging techniques that one would have to use for similar type wells, similar number of wells, assuming the area is not the same production wise. Is that a fair assessment?

MR. WEST: Obviously, I don't agree with that. But, I mean, it's a fair assessment; because we all have

our own interpretations of that.

BOARD MEMBER HAROUNY: Could I refer back to Exhibit J? And look at the number of wells that were drilled almost all at the same time, at least they may have been drilled at different times, correct?

MR. WEST: Well, they were drilled in late 2007 through 2008.

BOARD MEMBER HAROUNY: When was the order issued? When was the pilot area authorized by the Board?

MR. WEST: Actually, we don't have an order authorizing a pilot area. We have two orders that allowed us to drill increased density in Section 6 and in Section 1. One of those wells is shown as one of the pilot wells, right there. That's a well that we were able to drill because of allowing us within the northwest quarter of Section 1 to drill a second well in that area, in that quarter section.

And we also have authority in the northeast quarter of Section 6. And we were planning on drilling that well this year. But we aren't drilling anything in Buzzard Bench this year because of the current economic environment.

BOARD MEMBER HAROUNY: So having completed all of those wells pretty much in June of 2008 -- and I'm looking at this, again, at Exhibit J, I believe it is --

if you look at the relationship between the ultimate EUR, including all the -- all the wells, infill drilling and the base wells, you are looking at 51 bcf of gas, 51 point --

MR. WEST: Yes.

BOARD MEMBER HAROUNY: -- bcf of gas.

MR. WEST: Yes.

BOARD MEMBER HAROUNY: The base wells were estimated based on their normal decline curve that was established before that at 31.5 bcf of gas. The relationship between the infill drilling wells is that you are getting about 70 percent more production by drilling the base wells -- by drilling the infill wells, sorry.

The issue that I have is: How many existing wells were there -- comparable wells were there? I'm trying to see if there's a relationship between the comparable wells, the type of wells that existed prior to, and the infill wells, to see if the relationship -- the infill wells are making 70 percent of the base wells, or not.

MR. WEST: Let's see. I mean, you had 11 infill wells and 18 base wells.

BOARD MEMBER HAROUNY: How many of those can we throw away because they didn't have any good production?

MR. WEST: I don't know that I would say 364 million cubic feet is not good production. It's a marginal well. That's the forest well. 364 is the Utah Federal 1-141KK. That's probably a marginal well.

The next one I see, at the next lowest recovery, is the 1-140K at 591 million. That's going to give you a 10, 15 percent rate of return at the prices that the gas was during the early part of their production and with the investments that you have been making at the time they were drilled.

But all of the other wells are clearly attractive. Even if you threw those two out, then you would still have -- well, you might have 1.9 instead of 1.7 bcf for the base wells in that case. Then you'd have to go over on the new area, and we'd throw out four or five bad wells there. And -- you know, so that's going the raise the recovery of the other side. You can look at all sorts of combinations, but I think you're going to still see they are fairly similar.

BOARD MEMBER HAROUNY: The issue that I have is -- the thing that I want to get to is: Are the infill wells making more gas, less -- is the ratio still 70 percent or less? If that's the issue, then there's clearly a little drainage issue here that needs to be considered, especially if the faults are conduits between

these infill wells and the base wells. If that has not come to pass yet, it will probably sometime in the near future.

MR. WEST: Could you repeat your question, again?

BOARD MEMBER HAROUNY: The question is: Are the infill wells making overall, on the average, side by side, what the average wells, base wells -- are they making the same amount of gas, less gas, or is there a pattern that the base wells are making less gas than -- or the infill wells are making less gas?

MR. WEST: The infill wells are making very similar production to the base wells. Some of them are making a lot more. We've got the production rates on the map. For example --

BOARD MEMBER GILL: Which exhibit is that?

MR. HUNTER: We're on Exhibit J, Mr. Gill.

MR. WEST: -- the State of Utah 16-8-31-13 is making 600 mcf a day.

MR. HUNTER: Just a brief interruption, Mr. West. Can you tell us what that's at, exactly?

MR. WEST: It's in Section Township 16 South, 8 East, Section 31. It's the red well in Section 13 -- I mean, Section 31.

It's making 610 mcf a day.

The current rate on the State of Utah 31-201QQ, to the southeast, is making 616. So those are basically very similar.

The well to the north, which is a 160-acre spaced well, the 16-8-31-12D, is making 830.

Over in Section 36 to the east, onto the west, the UP&L 16-7-35-44, which is an infill well, is making 440.

The well to the north of it, the State of Utah, 36-100T, is making 486.

The well to the west, and it's an infill well in Section 36, the UP&L 16-7-36-24D, is making 754 mcf a day. It's offset to the northwest.

35-139 is making 305.

I mean, I think you see that the infill wells and the current wells are performing very similarly.

BOARD MEMBER HAROUNY: And then pressure data suggests that, too, the bottom hole pressure?

MR. WEST: Well, all the wells have a -- we only have a flowing bottom hole pressure on them. We don't typically take shut-in bottom hole pressures. So we keep all the wells pumped off. So they are all encountering a very similar bottom hole flowing pressure.

BOARD MEMBER HAROUNY: The last question I have for you -- another question that I have for you --

is that if you look at the -- again I think Exhibit K, the decline curve -- if you look at the original wells, there's a period of dewatering in the original wells and the production inclined. And so that is totally different than what you see in the infill wells --

MR. WEST: That's true.

BOARD MEMBER HAROUNY: -- because if for a couple of months there's no dewatering period --

MR. WEST: That's right.

BOARD MEMBER HAROUNY: -- then you automatically go into a decline.

MR. WEST: You're not going into a decline. What you're saying is: No dewatering, peak rate almost immediately, and flat production thereafter. And if you look at Drunkard's Wash, which is an older field, the later development showed exactly the same thing.

You had more recent wells after the first 3 or 4 or 5 years of development at Drunkard's Wash. When that field was being developed, you had many wells coming in at peak production and then flatten, without dewatering.

So both fields, which really are a very similar mechanism, basically could be considered one producing trend, having exhibited this, you dewatered the system with the earlier wells. And you are getting some of the benefit of that from later development.

Most of the wells drilled in both areas in the last three to four years haven't encountered nearly dewatering of the original wells.

BOARD MEMBER HAROUNY: Last question I have for you is -- and again, it dovetails into what was testified to before -- is the fracture systems and fracture orientation are different in different parts of the field. Would that hinder your ability and cause some unnecessary wells to be placed because the original well may have, based on its fracture orientation, may have drained the area that you are placing your second well?

MR. WEST: I think you can only look at that statistically. On average, you are going to get economic wells in the fracture systems where you have established fracture systems. On an average basis, you are going to get good wells that are economic for the total program. Will there be some wells that -- that we drill that we see have been partially depleted or may be unnecessary? That's possible. But you also would have probably never drilled the 14-55 if you drilled its offsets first. And you would have had very poor wells with no 17 bcf well in between.

So you've got to look at production trends and the performance as you drill in those areas where you have some understanding of the geology but you don't have

complete understanding, and you potentially are going to drill a well or two.

But on an economic basis, the benefit of drilling the other 30 wells, that you wouldn't have drilled without drilling a program, far offsets the economic costs of drilling one well that maybe, quote, was unnecessary. But you can't tell which one is unnecessary until you drill it.

BOARD MEMBER HAROUNY: Last question, then I'm done.

There's one location that you haven't drilled yet in the previous -- in Section 6 --

MR. WEST: Yes.

BOARD MEMBER HAROUNY: -- due to economic conditions you said today.

So why are we asking for this approval right now, today, since you haven't --

MR. WEST: We're anticipating -- and if you ask everyone in this room this question, you'll get a different answer -- but we're anticipating that the gas pricing is going to improve next year. We're anticipating that we're going to see better gas prices within the next 12 months. And we want to be ready to be able to act on that at that time. Whether that's going to come first quarter or fourth quarter, is anybody's

guess.

BOARD MEMBER HAROUNY: Thank you.

CHAIRMAN JOHNSON: Mr. Gill.

BOARD MEMBER GILL: Just to follow up.

Is that in the gas price or in the differential?

MR. WEST: We're anticipating both. We should see better gas price. And also the differential should go back to more historical rates. The Express hopefully will help that, but only time will tell.

BOARD MEMBER GILL: Last question for me: Would you go to Exhibit J? And go to Section 31 at the top -- it's not numbered -- if I'm counting right.

And would you just explain all the symbols and numbers that are used there? There's a few that I don't understand. So just take that State of Utah 31-201Q2.

MR. WEST: Yes. I think what you are -- you want to know what the numbers are around the wells, or what those lines are?

BOARD MEMBER GILL: Yeah. You've got numbers around each of the symbols, and a few of those numbers -- can you just clarify what those numbers are? Then I'm done.

MR. WEST: Yes.

BOARD MEMBER GILL: First is the name of the well.

MR. WEST: First is the name of the well. On the left-hand side of the well, the first number is the water cum. And then the blue one underneath that is the daily water rate. Then on the right-hand side, that's the gas cum. And then, in red is the gas daily rate. And it is in the legend on the right that it's explained.

BOARD MEMBER GILL: And then below that you have this 0310-0908. What is that?

MR. WEST: That's the date of first production and the date of last production. That shows that the -- I can't read those numbers.

BOARD MEMBER GILL: That's good, because me, either. And then Ferron formation below that. And what's that final number?

MR. WEST: That final number is the EUR, the estimated ultimate recovery for that well, that we also showed on the previous table.

BOARD MEMBER GILL: And then on that, you show lines to other wells.

MR. WEST: Yes. Those are directional wells.

BOARD MEMBER GILL: And then what's the one that has the -- if you look in the well symbols lower right, you've got something I haven't seen before called a "new symbol."

MR. WEST: In Section 31, that's where we are

planning on drilling another well; that is, I believe in the units that is the location that...

BOARD MEMBER GILL: But it hasn't been drilled yet.

MR. WEST: No, that has not been drilled yet.

BOARD MEMBER GILL: That's all I needed.

BOARD MEMBER SEMBORSKI: Just out curiosity, what is a "junked gas well"?

MR. WEST: I'm trying to see where we have one on this. I see it as a -- a junked gas well would be a well that's temporarily abandoned. Or we had one well that we had to shut-in because it was right next to a coal --

MR. O'KELLEY: Coal waste pile was on fire above it.

MR. WEST: So we had to shut that well in because the coal waste pile above it was on fire. So we had to shut that well in.

BOARD MEMBER SEMBORSKI: It wouldn't be, for example, a P&A well?

MR. WEST: No, not necessarily.

CHAIRMAN JOHNSON: I think we're through with questions, Mr. Hunter.

MR. HUNTER: I'd like to ask the Board's indulgence and ask a few follow-up questions of Mr. West

to clarify his testimony.

REDIRECT EXAMINATION

BY MR. HUNTER:

MR. HUNTER: Mr. West, just to address some questions from Ms. Semborski and Mr. Gill.

XTO is not asking to go to 80-acre spacing. Is that correct? We're just asking to go to two per 160.

MR. WEST: Yes.

MR. HUNTER: So Mr. West, your understanding of the situation we have here is that we are down -- we are increasing the density a little at a time. Is that right?

MR. WEST: Yes.

MR. HUNTER: And would the reason for that be because XTO is not sure exactly what areas are being drained or how they are being drained?

MR. WEST: Yes.

MR. HUNTER: And you are attempting to increase -- you're extending this as a pilot program, or expanding this as a pilot program, more or less to gain better knowledge of what those drainage volumes and drainage areas would be.

MR. WEST: Not to contradict my previous testimony, I don't see it as a pilot. I mean, you always are extending development concepts. I don't think this

is a pilot. I think we've proved that increased density in allowing a second well in a 160 has demonstrated that we get incremental reserves that are economic to develop in the areas that you have good fault and fracture systems. So I think we have proved that with the pilot. We are not asking that we be able to drill a second well in every 160, because some of the areas don't have the fracture system that we see in these areas.

This area is correlative to our current pilot. As we drill some of this area, we will, on the fringes of what we're drilling, get into some areas that may not be as fractured. And so we will better understand, once we are allowed to develop these areas on increased density, where we need to expand next. We don't think we know enough to say we need to do this everywhere in the field. But we do think we need to do it in this particular area because it's most similar to the pilot area.

MR. HUNTER: And as a contrast, Mr. West, then, if you were to do a full-blown development, you might ask for the entire field and know that your final idea of what the spacing or density would need to be, because you would be certain, or have a better idea of what to encounter over the entire field.

MR. WEST: As we learn more, we can come back and ask for expanded areas that we want, and maybe for

the whole field, to be able to drill a second well in all 160s. And just like Ms. Semborski -- if I mispronounced that I apologize, Jean --

BOARD MEMBER SEMBORSKI: That's fine.

MR. WEST: -- like she identified, we might find that we need 40s. We're in the process of continuing to understand this reservoir as we get more data and more experience. All we can say, right now, is we see we do need what we're asking for today, so that we can continue to develop wells that will develop reserves that won't be developed otherwise, won't be drained otherwise. And from that, we're going to learn some more information that may want us to expand more of the field to infill 80s.

MR. HUNTER: And Mr. West, along those same lines, your testimony today would be that, in your expert opinion if you do not drill these 80-acre increased density wells, you will be leaving approximately 1.8 bcf of unrecovered gas in the ground --

MR. WEST: Yes.

MR. HUNTER: -- per well.

MR. WEST: Yes.

MR. HUNTER: Furthermore, Mr. West, is it your understanding that it is the expected ultimate recovery, total recovery, from the reservoir that is your main

goal. You want to extract the most resources as efficiently as possible from the ground.

MR. WEST: Yes.

MR. HUNTER: And, Mr. West, finally, the fault systems that were referred to by Mr. Harouny, simply because you are draining water from the fault systems does not necessarily mean you are also draining the gas from those fault systems. Would that be an accurate statement?

MR. WEST: If you -- let me answer it a little different way: If you are draining -- you could be draining the water from those fault systems, but not adequately draining the gas out of the coals along those fault systems. The fault systems and fractures are interconnected. You can, from the frac systems, drain the water out. But you are not going to get adequate drawdown right next to the coal face to get a significant amount of gas out of the coals. I think is what we're seeing.

MR. HUNTER: I have no further questions.

BOARD MEMBER JENSEN: I have a question, Mr. Chairman.

CHAIRMAN JOHNSON: Mr. Jensen.

BOARD MEMBER JENSEN: You are talking about drilling of a second well in a 160 and this isn't a pilot

program. But when I look at your agency request, in paragraph 13, you do say you are asking for an extension of the pilot program. And then when I look in your relief requested, in 3A and 3B, you are saying that you want to modify such that you end up with 80-acre well spacing.

So is there a play on words that's going on? When I look at what you've stated and what you've requested, it talks about an extension of the pilot program and 80-acre spacing.

MR. HUNTER: I believe that the question is directed towards me, as counsel.

And I think that the answer to that is that the original pilot program we presented evidence of today went down to 80-acre well density on the equivalent of. That is the expansion that we're asking for.

To the extent that the evidence given today and testimony given today characterizes that more as a full development program, that may be a more accurate statement and what the Order should finally reflect. The request, it may be, as you say, a play on words, but the idea is that -- as alluded to by Ms. Semborski and Mr. Gill -- is that this may not be the final word as to what XTO finally determines is an appropriate development scenario for the whole field. This is a narrow request

covering specific acreages where they have evidence of a certain type of geological control, as the Division said. And they want to explore that and develop that as fully as possible.

BOARD MEMBER JENSEN: Thank you.

CHAIRMAN JOHNSON: Mr. Hunter, do you want to enter your exhibits at this time?

MR. HUNTER: Yes. I would like to enter our exhibits at this time at the conclusion of our presentation in chief. Also, would like to ask the Board to take official notice of those prior Board Orders that I referred to but have not submitted exhibits of because they will not be effective, but they are relevant to the history of the development of this area.

CHAIRMAN JOHNSON: So you are asking to enter Exhibits A through P?

MR. HUNTER: That is correct, as well as the official notice.

CHAIRMAN JOHNSON: Does the Board have any objections? Then those are admitted.

MR. HUNTER: I'd like to reserve some small, brief time to make closing remarks or rebut any further testimony that comes out.

MR. ALDER: Mr. Chairman, if I might, too, before you call on me to begin my case, I would like a

follow-up question, if I could, of Mr. West.

CHAIRMAN JOHNSON: Please.

MR. ALDER: Thank you.

RECROSS-EXAMINATION

BY MR. ALDER:

MR. ALDER: Mr. West, I understand that XTO is 100 percent owner of the lands that are in question in this hearing today. But I'm wondering if you could, for our assistance in future cases, answer a question as to what you would define as the pool or formation for this gas -- that contains this gas. In other words, if there were an issue of correlative rights, does the gas come from the coal, from the faults, from the field? How would you define that?

MR. WEST: Well, I think it's definitely a coalbed methane field. And the gas is predominantly coming from the coal. The fracture system provides an increased conductivity to the coal and facilitates quicker dewatering of the coals. But the gas is absorbed through the face of the coal and the cleat system, and by dewatering and lower the pressure in the system, then that gas is released and produced from the matrix of the coal through cleats and into the fractures.

MR. ALDER: Thank you very much.

CHAIRMAN JOHNSON: Mr. Alder, I think we're

ready to turn the time over to you.

MR. ALDER: Thank you, Mr. Chairman.

CHAIRMAN JOHNSON: Looking at the time, it's a quarter after one. I'm assuming that your presentation is not going to be very long, because I think Mr. Hunter took great lengths to try to address the issues that were raised by the staff memorandum. I'm just wondering how long you think your presentation will be, and should we break for lunch before we do.

MR. ALDER: Mr. Chairman, I appreciated the indulgence, also, in letting us ask questions. And I believe that all that we would have is to ask Mr. Hunt to summarize the Division's position, probably two or three minutes.

CHAIRMAN JOHNSON: Okay. Let's do that, then.

MR. ALDER: I'd ask that Mr. Gill Hunt be sworn.

THE REPORTER: You do solemnly swear the testimony you are about to give will the truth, the whole truth, and nothing but the truth so help you God?

MR. HUNT: I do.

DIRECT EXAMINATION

BY MR. ALDER:

MR. ALDER: Would you state your name and your position at the Division for the record?

MR. HUNT: Gill Hunt. I'm associate director

for the oil and gas program.

MR. ALDER: And did you do the summary of the Division's position, and could you present that to the Board.

MR. HUNT: Yes. The Division staff followed our usual procedure for reviewing requests in this instance. We also filed our memo on November 17th. We did have a few concerns that we mentioned in the memo. We believe that XTO has done a good job of justifying the request, and they have addressed all of our concerns in the memo. And they have testified that additional gas will be recovered economically if this is approved and they're allowed to drill additional wells. And along with that, the Division would recommend that the Board approve this request.

CHAIRMAN JOHNSON: Mr. Hunter, any questions for Mr. Hunt?

MR. HUNTER: No, sir.

CHAIRMAN JOHNSON: Does the Board have any? Good.

Then I think we're back to you to summarize, Mr. Hunter.

MR. HUNTER: Thank you, Mr. Chairman. I would just like to state that XTO has satisfied the statutory and regulatory requirements for granting the requested

relief, perhaps as modified as we discussed with Mr. Jensen at the Board's judgment and discretion. And that will allow for a greater recovery of the resource without waste and with full protection of correlative rights.

And I'd like to thank the Board for their time, attention, and consideration of this matter.

CHAIRMAN JOHNSON: Is there anyone else present who would like to address the Board on this matter? Seeing none, then we will break for deliberation and lunch and return with an answer.

We thank you very much for your presentations and successful defense of your theses.

MR. ALDER: Mr. Chairman, would you have a time that we could allow for lunch?

CHAIRMAN JOHNSON: Let's say a minimum of one hour.

MR. ALDER: Thank you.

CHAIRMAN JOHNSON: So we'll reconvene no sooner than 2:20.

MR. HUNTER: Thank you, Mr. Chairman.

CHAIRMAN JOHNSON: Thank you.

(The Board recessed for deliberation and lunch break from 1:20 p.m. to 2:21 p.m.)

CHAIRMAN JOHNSON: Let's go back on the record.

We're going to go on the record just to announce

this decision, and then we'll take a quick break while everybody gets set up for the next matter.

The Board decided unanimously to grant your petition. And Mr. Hunter, would you please prepare the order.

MR. HUNTER: I would be happy to.

CHAIRMAN JOHNSON: Thank you very much. We appreciate your presentation.

We're going to take a short break while the parties get ready for the next matter. And we'll reconvene as soon as everyone is ready and available.

(The hearing concluded at 2:21 p.m.)